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**Rural–Urban Migration in Indonesia: Survey Design
and Implementation**

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Abstract

This paper summarizes the study design of the Rural–Urban Migration in China and Indonesia (RUMiCI) project. We first discuss the overall distribution of migrants in Indonesia and the selection of survey cities. Next, we describe the process of identifying the migration status of each household in the sampling frame, using a pre-survey listing. This is followed by a discussion of the sampling method, focusing on the oversampling of migrant households. The timeline of the survey is then discussed and the questionnaire is summarized. Finally, we provide some concluding remarks.

JEL: C81, C83, J61, R23, O15

Key words: migration, survey design, sampling, questionnaire

1 INTRODUCTION

This paper summarizes the study design of the Rural–Urban Migration in China and Indonesia (RUMiCI) project. We first discuss the overall distribution of migrants in Indonesia and the selection of survey cities. Next, we describe the process of identifying the migration status of each household in the sampling frame, using a pre-survey listing. This is followed by a discussion of the sampling method, focusing on the oversampling of migrant households. The timeline of the survey is then discussed and the questionnaire is summarized. Finally, we provide some concluding remarks.

The study design is based on the research objectives of the Rural–Urban Migration in China and Indonesia (RUMiCI) project. The first of these objectives is to investigate the labour market activities and welfare of individuals who have moved from rural to urban areas. Thus, one population of interest is households whose heads have moved from a rural to an urban area. We focus on this group of households because they are the most likely to experience profound changes in relation to jobs, incomes, and educational attainment; these changes in turn can be expected to provide the impetus for dynamic socio-economic and demographic change in the regions they move to and those they leave behind. The focus on rural-to-urban migrant households facilitates the second main objective of the RUMiCI study, a comparison of migrant households in China and Indonesia.

The other population of interest is a comparison group consisting of households whose heads were raised mainly in an urban area. Information on this group is used to ascertain the degree of assimilation of migrant households. The migration status of the household head is considered to represent the migration status of that household, as the behaviour of the head is likely to significantly affect the well-being and behaviour of other members. This definition also simplifies the study design.

The longitudinal nature of the RUMiCI study together with the frequent collection of data is likely to increase understanding of the diversity of migrants and changes in their well-being. While existing cross sectional data for Indonesia delivered through national censuses and intercensal population surveys provide information on migrants at a particular point in time, they do not shed light on changes in the welfare and

behaviour of migrants. The Indonesian Family Life Survey is a good source of longitudinal data on migrants, but it is conducted at relatively infrequent intervals, making it difficult to examine year-to-year changes (See Strauss et al. 2009). The lack of annual panel datasets specifically on migrants has made it difficult to conduct any detailed investigation of their assimilation and income mobility patterns.

The RUMiI study aims to fill this gap by providing rich information on 1,521 Indonesian households headed by rural-urban migrants, and another 850 headed by non-migrants, in four municipalities. The group of migrant households consists of 637 recent migrant households (those whose head arrived from a rural area within five years of the initial interview, conducted in 2008) and 884 lifetime migrant households (those whose head arrived more than five years before the initial interview). The researchers intend to track as many of those households as possible over five years from 2008 until 2012.

The Indonesian and Chinese studies differ in several ways. First, during its first two years (2008 and 2009) the Indonesian survey was conducted in urban areas only, whereas the Chinese study was carried out in both urban and rural areas. Second, the definition of a rural–urban migrant differs significantly between the two countries: the Chinese definition is based on the *hukou* registration system, while the Indonesian definition is based on birth area and extended experience in a rural environment during childhood (see section 3 below). Third, the Indonesian survey is based on visits to residential structures, while the Chinese sample is based on visits to workplaces, such as factories and stores. Because the Indonesian study does not capture migrants living in non-residential structures, the Indonesian sample is likely to comprise migrants who have settled more permanently in the destination area.¹

2 SELECTION OF SURVEY CITIES

Four cities or municipalities (*kota*) with a large number of migrants were selected for the RUMiI study. Although the scope of the study was not large enough to obtain a nationally representative sample, these four cities are likely to capture some of the diversity of the migrant experience in Indonesia. The municipalities were chosen to

¹ The prevalence of circular, seasonal and other types of temporary migration is high in Indonesia (Hugo 1982). To the extent that these types of migrants do not reside in residential structures or register with the relevant local authority, they are less likely to be included in the study.

represent four broad geographic regions: (1) Sumatra; (2) Java and Bali; (3) Kalimantan; and (4) Sulawesi, Papua, Maluku and Nusa Tenggara (that is, eastern Indonesia). Sumatra, Java, Kalimantan, Sulawesi and Papua are the five largest islands in Indonesia. They have diverse cultures, languages and socio-economic characteristics.² All except Papua have at least one large urban enclave of rural–urban migrants. One of the largest enclaves in each region was chosen for the survey, taking into consideration survey costs and the availability of local staff. Information on the concentration of migrants was drawn from the 2005 Intercensal Population Survey (Survei Penduduk Antar Sensus, or Supas).

Definition of a Rural–Urban Migrant

The Supas is a nationally representative, cross-sectional household survey. It is conducted every 10 years between two censuses. The last three censuses were conducted in 1980, 1990 and 2000; the last three intercensal surveys were conducted in 1985, 1995 and 2005. The Supas provides information on residence at time of birth for all individuals, and residence five years previously for individuals aged six or above.

Information from the Supas allows us to distinguish two types of migrant households: long-term and short-term. A long-term migrant is someone whose current residential area is different from his or her birth area.³ If the birth area of that person is rural, then the person is classified as a long-term rural–urban migrant. A short-term migrant is someone whose current residential area is different from his or her residential area five years previously. If the residential area of that person five years previously is classified as rural, then the person is considered a short-term rural–urban migrant.

The distinction between urban and rural areas is based on the classification provided by the central statistics agency, Statistics Indonesia, in 2005. Based on socio-economic characteristics such as population density, the proportion of households engaged in agriculture and the availability and quality of infrastructure (Surbakti

² See Cribb (2000) for a historical treatment of the demographic, sociocultural and economic diversity of Indonesia at the subnational level.

³ These migrants are often referred to as ‘lifetime’ migrants in the Indonesian context. However, we reserve the use of this term for the specific sense in which it is used later in this paper.

1995), Statistics Indonesia defines an area as being either a rural district (*kabupaten*) or an urban municipality (*kota*) (Statistics Indonesia 2006).

The characteristics of migrants can be refined further by considering the age at which a person leaves the place of origin and the degree of attachment to it. For example, an individual who was born in a rural area and moved to an urban area after just a few months or years might well be indistinguishable in skills and experience from an individual born in an urban area. Based on this consideration, the RUMiI study collected information on whether an individual had lived in a rural area for a total of five years or longer before graduating from primary school. The study also obtained information on past residence, the frequency of visits to the area of origin and the amount of time spent there, to allow comparison of the different ways of defining migrants. In analysis based on the Supas, however, the definition has to be based on past residence, because this is the only source of data available.

Individuals residing in places other than residential buildings are excluded from the Supas, and from our survey. The Supas enumerates households residing in legal residential buildings; thus, it would not cover people living in temporary dwellings or non-residential buildings.⁴ Our sampling framework is based on the same list of households used by the Supas, so this applies to our survey as well.

The rural/urban classification provided by Statistics Indonesia provides a rough indicator of the rural/urban status of an individual's community (village) of origin when that person left the community. Of course, it is possible that an area's rural/urban status may have changed over time, or that a rural area contains some urban communities (and vice versa). However, in the absence of community-level information on past place of residence in the Supas, or the capacity to establish the exact rural/urban status of every area in the year of birth of each individual, we rely on the 2005 Statistics Indonesia definition. To the extent that municipalities may have contained rural communities when individuals left their area of origin, the estimated

⁴ A number of special procedures were introduced in the 2000 census to try and include as many squatters and people living in temporary dwellings as possible. However, Hull (2001) reports difficulties in enumerating some of these migrants because they were reluctant to cooperate with the enumerators.

number of rural–urban migrant households is likely to provide a lower bound for the estimated number of rural–urban migrants.

Enclaves of Migrants in Four Regions

Estimates based on the residence-based definitions of long-term and short-term migrants indicate that long-term rural–urban migrants comprise a significant proportion of the urban population, and short-term rural–urban migrants a relatively small proportion (see Table 1). Of the 44 million individuals living in municipalities in 2005, 16 million (36 per cent) were long-term migrants (their area of birth was outside their current area of residence). Of these, 11 million people (67 per cent of all long-term migrants, or 24 per cent of the total urban population) were born in areas that were considered rural in 2005, making them long-term rural–urban migrants. These estimates suggest that around one in four urban residents is from a rural area.⁵ Of the 40 million individuals aged six or above in 2005, 3 million (8 per cent) had lived in a different area five years previously, forming a group of short-term migrants. Of these, 2 million (61 per cent of all short-term migrants, or 5 per cent of the total urban population aged six or above) had lived in a rural area five years previously, making them short-term rural–urban migrants.

As Table 1 indicates, Java/Bali absorbs large numbers of short-term and long-term migrants, reflecting its high share of the total population. In 2005 the region had a population of 27.5 million (62 per cent of the total urban population), including 6.5 million long-term migrants from rural areas (61 per cent of all long-term rural–urban migrants) and 1.2 million short-term migrants from rural areas (60 per cent of all short-term rural–urban migrants). Sumatra was the second-largest region with a population of 9.5 million (22 per cent of the total urban population) in 2005. This included 2 million long-term rural–urban migrants (19 per cent of all long-term rural–urban migrants) and 421,000 short-term rural–urban migrants (21 per cent of all short-term rural–urban migrants). That is, in both regions the number of rural–urban migrants was roughly proportional to the region’s share of the total urban population. Kalimantan and eastern Indonesia had far fewer inhabitants: only 3 million (7 per cent of the total urban population) in the case of Kalimantan and 4 million (10 per cent of the total urban population) in the case of eastern Indonesia. However, with more than

⁵ Due to a possible error in the definition of a rural area, this may be an underestimate.

851,000 and 1.2 million long-term rural–urban migrants respectively, both had slightly higher shares of long-term rural–urban migrants relative to total population than the other two regions—at least 28 per cent, compared with 24 per cent or less for Java/Bali and Sumatra.

The results from the Supas confirm that each region has a major enclave of migrants from rural areas (see Appendix Tables). In Java, five municipalities that make up the capital, Jakarta, had 2.4 million long-term and 430,000 short-term migrants from rural areas in 2005. Medan, the largest enclave in Sumatra, had 275,000 long-term and 55,000 short-term migrants from rural areas. It is followed by Batam, with 222,000 long-term and 70,000 short-term migrants from rural areas. The largest enclave in Kalimantan is Samarinda, which had 189,000 long-term and 29,000 short-term migrants from rural areas. The next largest is Balikpapan, which had 144,000 long-term and 25,000 short-term migrants from rural areas. Among the eastern Indonesian islands, one municipality stood out as a major enclave: Makassar with 331,000 long-term and 82,000 short-term migrants of rural origin.

In most cases, the largest enclave in each region was selected for the survey: Medan in Sumatra, Samarinda in Kalimantan and Makassar in eastern Indonesia. The exception was Tangerang in Java, which had a smaller number of rural–urban migrants than some Jakarta municipalities. But although Jakarta absorbed the largest number of migrants, the cost of conducting a survey there was expected to be high, and the neighbouring municipality of Tangerang was considered a good substitute. Tangerang is the eighth largest enclave in Java, with 348,000 long-term and 65,000 short-term migrants from rural areas. Many migrants in this municipality are likely to work in Jakarta, and probably share some characteristics with migrants in Jakarta. These four municipalities—Medan, Samarinda, Makassar and Tangerang—together with the capital city of Jakarta cover 33 per cent of all long-term and short-term migrants of rural origin in Indonesia.

3 THE PRE-SURVEY LISTING

For each of the selected municipalities, we obtained the list of households in randomly selected census blocks prepared by Statistics Indonesia for enumeration of the 2007 National Socio-Economic Household Survey (Survei Sosial Ekonomi

Nasional, or Susenas).⁶ The Susenas is a large-scale, nationally representative, repeated cross-section survey conducted since the 1960s. A census block is a group of residential segments with some clear borders, each containing about 100 dwellings. Every year, Statistics Indonesia selects about 12 per cent of the census blocks and conducts interviews with 16 households in each block.

Statistics Indonesia regularly updates its information on households residing in the selected census blocks, so the 2007 Susenas list provided us with recent information on residents in the municipalities to be surveyed. Our sampling frame consisted not only of households interviewed for the Susenas, but all households in the selected census blocks. In Tangerang, we added the list of households living in surrounding areas, because the municipality contained fewer households than the other three municipalities. Many of the individuals in the additional households would have worked in Tangerang even though they did not live there. Altogether, the 2007 Susenas list yielded information on 20,682 households for our four survey sites. The top row of Table 2 provides a breakdown across the four municipalities.

Because the Susenas list does not contain information on the migration status of household heads, we conducted a pre-survey listing to obtain this information. The objective was to classify households into three groups according to the migration status of the head: (1) non-migrant households;⁷ (2) recent rural–urban migrant households (those that had arrived in an urban area within the last five years); and (3) lifetime rural–urban migrant households (those that had lived in an urban area for more than five years). There were two main reasons for separating recently arrived households from other rural–urban migrant households. First, we felt that recent migrants were likely to exhibit more dynamic changes during the five years of the study. And second, we intend to compare this group of migrants with a similar group of Chinese migrants during the course of the study. However, recently arrived migrants are a relatively small group, as the 2005 Supas shows. We hoped to overcome this difficulty by separating recent from lifetime migrants and oversampling the former group to facilitate the statistical analysis.

⁶ See Surbakti (1995) for a history of the development of the Susenas.

⁷ The non-migrant category included households that had migrated from another urban area to the urban area in which the household head was currently residing.

The rural versus urban status of a household was decided on the basis of three questions in the pre-survey listing. The first question was: ‘Did the household head live in a village (rural area) for a total of five years before the completion of primary school?’ ‘Village’ in this case was subjective: if the household head regarded the place of origin as a rural area and answered ‘yes’, then the household was counted as a rural–urban migrant household; if the household head regarded it as an urban area and answered ‘no’, then the household was not counted as a rural–urban migrant household. Rural–urban migrant households were then asked the following two questions: ‘How long (years and months) has the household head lived in this municipality?’, and ‘How long (years and months) has the household head lived in any municipality, including this municipality?’ If the head had lived in either the current municipality or some other municipality for more than five years, then the household was categorized as a *lifetime* rural–urban migrant household. If the head had lived in a municipality for less than five years, then the household was classified as a *recent* rural–urban migrant household. In the small number of cases where the head of a rural–urban migrant household had arrived in the urban area within the previous month, and therefore may have been residing there only temporarily, the household was excluded from the sample.

Of the 20,682 households on the 2007 Susenas list, we were able to obtain information on the migration status of 17,682 households, or 86 per cent (Table 2). The other 3,000 households could not be contacted for a variety of reasons: 746 (about a quarter) because the information on household name and address was unclear;⁸ 1,463 (about half) because the dwelling was unoccupied;⁹ 508 (17 per cent)

⁸ The most common problems were missing street numbers and the use of abbreviations (or nicknames) for the surname of the household head. Some names are very common in certain areas; Sundanese names such as Cecep and Ujang are often found in West Java, for example, and Daeng is common in Makassar. When both the address and the name of the household head were unclear, it was difficult for the enumerator to identify the listed household. There was a relatively large number of such cases in Tangerang, where the rapid growth of the municipality may have been accompanied by frequent movement of residents and changes in neighbourhood structure.

⁹ If a dwelling appeared to be unoccupied, the enumerator was instructed to ask the neighbours about the whereabouts of the household. In some cases neighbours confirmed that no one was resident at the address; in others, neighbours did not know whether or not the dwelling was occupied.

because the resident could not be located;¹⁰ and 139 (5 per cent) because the resident refused to be interviewed. Most of the latter cases were in Medan, where field observation suggested that many Chinese households declined to be interviewed. Overall, however, refusal was not a significant cause of no contact.

After excluding 32 households whose head had lived in the municipality for less than one month, we were left with 17,650 households as the basis of the sample. About half of these households could be classified as rural–urban migrant households. Of these, 15 per cent (or 8 per cent of the total sample) were recent migrant households.

4 SAMPLING

The study aimed to obtain a sample of about 2,500 migrant and non-migrant households. To maximize the accuracy of the estimates, we hoped to obtain roughly equal sample sizes for non-migrants, lifetime migrants and recent migrants in each of the four cities. However, the listing results suggested that we would fall short of the target for recent migrants in Medan. Also, we had already allocated more local staff to the two larger cities, Medan and Tangerang, in the expectation that they would have more heterogeneous populations.¹¹ Based on these factors, the sample was allocated as indicated in Table 3. The main (target) sample for all four cities consisted of 918 non-migrants, 918 lifetime migrants and 664 recent migrants. The target samples for Samarinda and Makassar were around 180 households in each of the three migration categories, while the target sample for Tangerang was 250 in each category. Because of the small number of recent migrant households in Medan, a target sample of 54 households was allocated to this category, with a larger sample of 303 assigned to the other two migration categories.

¹⁰ If a dwelling appeared to be occupied, the enumerator asked the neighbours about the whereabouts of the household. Some neighbours did not know the household on the Susenas list and did not know whether there was a new resident; some told us that the previous resident had died or moved away; some knew who was living in the dwelling but did not know the whereabouts of the residents; and some told us that the residents were temporarily away (on a business trip or holiday, for example).

¹¹ The sample was initially allocated across the four cities according to population size, based on the expectation that the two larger cities, Medan (with a population of 2 million) and Tangerang (1.5 million), would have more heterogeneous migrant and non-migrant populations than Samarinda (574,000) and Makassar (1 million). However, later analysis of the 2000 census indicated that large cities did not necessarily have more heterogeneous populations.

In addition to the main sample, a reserve sample (in most cases 20 per cent for each group) was drawn up, to be used if the number of interviews fell short of the target due to refusal or some other interview failure. Also, to increase the size of the recent migrant sample, the reserve sample of recent migrant households in Tangerang (the largest source of recent migrants) was increased to 60 per cent of the target sample. Another modification to the basic sampling framework was required in Makassar. Pilot tests and local knowledge told us that a high proportion of recently arrived single migrants were likely to be students, a group of limited interest to us because of the study's focus on labour market analysis.¹² Also, we wanted to avoid the problem of high levels of attrition that would result if a large number of the students moved to Jakarta or some other large municipality to work during the five years of the survey—a common choice among students living in Makassar. We therefore decided to divide recent migrant households in Makassar into single-member and multiple-member households, and undersample the former group.

Tables 4–6 show the number of households in the sampling frame, and the number approached for interview (visited), for each of the three migration categories. The number of households visited varied across cities and migration categories. In Makassar, only the main sample was used for non-migrant and lifetime migrant households (Tables 4 and 5 respectively), because the target sample sizes were more or less reached. However, both the main and reserve samples were used for recent migrant households (Table 6), because many households listed as recent migrants turned out to have been listed incorrectly. In Medan, both the main and reserve samples as well as the training sample were used for all migration categories, mainly to increase the sample size for recent migrant households.¹³ In the other two municipalities, the main and reserve samples were used for all categories.

The initial sampling factor was computed for each migration category and municipality as the number of households visited divided by the number of

¹² The proportion of single-member recent migrant households in Makassar was 53 per cent, compared with 17 per cent for the survey's base population.

¹³ The samples selected for interview during the training period were extracted randomly from the base population together with the main and reserve samples. Thus, the whole sample still consisted of a randomly selected set of households. Inclusion of the training samples in the final dataset is being considered.

households in the sampling frame. The attempt to attain a similar sample size across groups of differing migration status resulted in a higher sampling factor for migrant—particularly recent migrant—households. In Medan, for instance, the sampling factor was 0.14 for non-migrant households, 0.22 for lifetime migrant households and 1.00 for recent migrant households. Recent migrant households had the highest between-municipality gap in the sampling factor, ranging from 0.15 for single-member households in Makassar to 1.00 in Medan, where all households in the base population were included in the sample.

The overall response rate (the number of households interviewed divided by the number of households visited) was 77 per cent, with 2364 out of 3060 households being interviewed.¹⁴ The rate for non-migrant households was 78 per cent (Table 4), 82 per cent for lifetime migrant households (Table 5) and 71 per cent for recent migrant households (Table 6). In the case of recently arrived migrants, it ranged from 46 per cent in Medan to 95 per cent for single-member households in Makassar.

Some households were not interviewed because a dwelling could not be found, its residents had died or moved away, or its residents were temporarily away and enumerators were unable to contact them after three visits. The combined share of such cases ranged from 11 per cent (for lifetime migrants) to 16 per cent (for recent migrants), with Samarinda having a relatively high proportion of interview failures for these three reasons. There were a few cases where the household consisted of an elderly person who was unable to answer questions. Outright refusal to be interviewed was rare: 3–5 per cent of households in each category refused to be interviewed, with the highest rates of refusal recorded among migrant households (both lifetime and recent) in Makassar.¹⁵

¹⁴ The interview rate increased to 82 per cent after we conducted in August of 2009 the supplementary survey of households that were not interviewed in 2008 due to inconsistency in the listing-based and survey-based migration status. The interview rate is still somewhat lower than the rate observed in other Indonesian data. For example, Frankenberg and Thomas (2000) report that the rate was 93.5 per cent in the 1993 Indonesia Family Life Survey, and BPS (currently Statistics Indonesia) had experienced the interview rate of about 90 per cent. One of the reasons for the relatively lower interview rate in our study is that some of our sample households are headed by individuals who recently migrated from other areas, who could be more mobile than individuals who have stayed in one area for a long time.

¹⁵ Similar factors contributed to cases of no interview in the 1993 Indonesia Family Life Survey (Frankenberg and Karoly, 1995).

Some households were not interviewed because their migration status was inconsistent with the status recorded in the listing. It seems likely that the information was incorrect because it was obtained from household members or neighbours who did not know the full migration history of the household head. The protocol adopted by the enumerator in such cases—and therefore the probability of such a household being interviewed—differed across municipalities. In Samarinda and Makassar, households were interviewed regardless of whether or not their migration status was consistent with the status recorded in the listing. In Medan and Tangerang, households whose migration status was recorded incorrectly in the listing, and that were revealed to be non-migrant or lifetime migrant households, were not interviewed. However, households confirmed as being recent migrant households were interviewed because of the scarcity of households in this category. Based on the principle that all households in the sample should be interviewed, in 2009 we revisited the households in Medan and Tangerang whose interviews had been terminated and collected information from them.

Among households whose migration status was recorded in the survey, the proportion whose migration status was confirmed as being correct was 86 per cent for non-migrant households, 82 per cent for lifetime migrant households and 68 per cent recent migrant households.¹⁶

5 ORGANIZATION AND TIMELINE OF THE SURVEY

Both the pre-survey listing and the main survey were conducted by the Indonesia Field Survey Project team established within the Faculty of Social and Political Sciences at Gadjah Mada University, Yogyakarta. This team supervised the regional teams established in each of the four municipalities surveyed. Each regional team consisted of a regional coordinator from Gadjah Mada University, supervisors, field supervisors, enumerators and data entry staff. The supervisors and enumerators were mainly lecturers, research staff and students from local universities or research agencies.

¹⁶ Weights are being analysed to take account of conventional non-response cases and the cases of households in Medan and Tangerang whose migration status was recorded incorrectly in the listing. That is, the initial sampling factor will be adjusted by incorporating the probability of a household being interviewed given listing-based migration status and survey-based migration status.

The general time line of the survey was as follows. The questionnaire for the pre-survey listing and main survey was designed between March 2007 and February 2008. During this period, Indonesia Field Survey Project staff tested the questionnaire in Yogyakarta and the survey cities, prepared documentation (such as a questionnaire manual) and developed survey and data entry protocols. They also carried out two pilot studies in which the main survey was implemented on a small scale in each survey municipality.

Field preparation for the pre-survey listing and main survey began in the middle of 2007 and continued until early 2008. This included observation of procedures in the field and supervisor training. The 2007 Susenas list of households was obtained, to be used as the sampling frame. The pre-survey listing was implemented in January 2008.

The main survey was conducted in March–May 2008. Set protocols on data collection and quality control were followed during the survey. Enumerators were given a list of the households to be visited together with a map of the area, and asked to contact their field supervisors by SMS if they struck problems. All interviews were subject to validation by supervisors. Data entry was controlled by a CS-Pro program, to ensure a logical flow of data entry and to identify extraordinary outliers (such as a respondent age of 150).

6 QUESTIONNAIRE

The purpose of the RUMiCI study is to gather rich information on labour supply, poverty, health and educational attainment in China and Indonesia, enabling a wide range of analyses and comparisons. The questionnaire developed for Indonesia consisted of six sections. The first concerned migration status and household composition. The questions in this section allowed enumerators to check the household's actual migration status against its listing-based migration status. The second section consisted of a household roster to ascertain the basic socio-economic and demographic characteristics of all household members. The third section inquired into labour market activities, migration history, migrants' links with and activities in the village of origin, and labour protection and social security. The questions on labour market activity identified five categories of workers: (1) salaried employees/wage workers in the private sector; (2) civil servants (including military and police); (3) self-employed; (4) individuals working for a family business without

payment; and (5) unemployed persons or those outside the labour force. The fourth section asked about household income, consumption, assets, liabilities and housing. The questions in this section were quite detailed, to allow an accurate estimate of household welfare. The fifth section asked about the dwelling in the place of origin, the type of identity card held in the current residential municipality, and residents' social networks. The last section was about mental health.

Institutional differences between China and Indonesia are reflected in some features of the questionnaire. For example, in Indonesia it is common for workers, particularly migrant workers, to hold several jobs at once. To capture this characteristic of the labour force, Indonesian questionnaire asked individuals who held multiple jobs to list all their jobs. It also contained procedures to decide the main jobs of these individuals. To better understand the characteristics of a worker's main job, the section on labour market activities was expanded to five categories, rather than three - salaried employees/wage workers, self-employed and unemployed – used in the Chinese survey. In particular, the Indonesian survey separated civil servants from other wage workers on the basis that these two groups receive very different levels of benefits. Unpaid work for family members was also distinguished, because this is distinct from self-employment or wage work, yet a crucial for households involved in small-scale enterprises. On the other hand, some information explored in the Chinese questionnaire was not included in the Indonesian questionnaire. This included information on the siblings and parents of a household head and that person's spouse, and on life events such as births, deaths and marriages.

While carrying out the survey, we found that some of the more subjective and hypothetical questions required additional explanation. Examples included perceptions of income level before and after a respondent moved to an urban area, of the wage an unemployed person would have been able to earn had he or she been employed, and of mental health. Some respondents did not understand some of the questions or the reasons for asking them. Also, the responses to some questions appeared to be affected by a measurement error. For instance, while information on both itemized and total expenditure was collected, there were inconsistencies between the two sets of data in some cases. Lessons learned from these issues were incorporated in the design of the questionnaire for the second wave of the survey.

7 CONCLUSION

This paper has reviewed the basic design of the Indonesia component of the RUMiCI study, including the selection of survey cities, listing and sampling procedures, the organizational structure and timeframe of the survey, and questionnaire. The study design provides the basis for a unique, large-scale, longitudinal study of rural–urban migrants in Indonesia and China. Preliminary analysis of the 2008 data indicates the scope of the analysis enabled by the data. We plan to track as many of the migrant and non-migrant households in the initial sample as possible in the coming years. Data from future rounds of the survey should provide us with additional information to analyse the welfare and behaviour of migrants. In particular, the data will straddle important events such as the 2008-09 global financial crisis, the 2009 Indonesian elections and the socio-economic changes that flow from these events. The RUMiCI study will provide original information on rural–urban migrants, who may be particularly vulnerable to economic shocks and social change.

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Table 1 Distribution of Long-term and Short-term Migrants by Region, 2005^a

Region	Total Population in Urban Areas	Long-term migrants				Urban Population Aged 6+	Short-term Migrants			
		Migrants ^b		Rural–Urban Migrants ^c			Migrants ^d		Rural–Urban Migrants ^e	
	(no.)	(no.)	(%)	(no.)	(%)	(no.)	(no.)	(%)	(no.)	(%)
Java & Bali	27,409,290	10,040,589	36.6	6,570,415	24	25,182,585	2,007,422	8	1,196,742	4.8
Sumatra	9,516,854	3,101,800	32.6	2,034,105	21.4	8,599,925	740,977	8.6	421,451	4.9
Kalimantan	2,902,837	1,163,982	40.1	851,035	29.3	2,611,588	207,629	8	134,615	5.2
Eastern Indonesia (Sulawesi, Papua, Maluku & Nusa Tenggara)	4,434,862	1,610,492	36.3	1,263,075	28.5	3,977,781	335,331	8.4	239,803	6
Indonesia	44,263,843	15,916,863	36	10,718,630	24.2	40,371,879	3,291,359	8.2	1,992,611	4.9

a The total population is estimated based on the weights provided in the Supas. The distinction between an urban area (kota) and a rural area (kabupaten) follows the 2005 classification developed by Statistics Indonesia.

b Individuals in urban areas whose birth area is different from their current residential area.

c Individuals in urban areas whose birth area is different from their current residential area and the birth area is rural.

d Individuals in urban areas whose residential area five years previously is different from the current residential area.

e Individuals in urban areas whose residential area five years previously is different from the current residential area and the residential area five years previously is rural.

Source: 2005 Intercensal Population Survey (Supas); Statistics Indonesia (2006).

Table 2 Results of the Pre-survey Listing by City^a

	Medan		Tangerang		Samarinda		Makassar		Total	
	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)
Total no. of households	5,363	100.0	6,416	100.0	4,568	100.0	4,335	100.0	20,682	100.0
No. of households not contacted^b	914	17.0	916	14.3	410	9.0	760	17.5	3,000	14.5
Reason for not being contacted										
Dwelling and name of household head was repeated in the sampling frame	19	0.4	65	1.0	1	0.0	3	0.1	88	0.4
Dwelling or household could not be found	191	3.6	451	7.0	30	0.7	74	1.7	746	3.6
Dwelling was non-residential	28	0.5	0	0.0	0	0.0	5	0.1	33	0.2
Dwelling was not occupied	371	6.9	316	4.9	300	6.6	476	11.0	1,463	7.1
Resident could not be contacted	180	3.4	65	1.0	63	1.4	200	4.6	508	2.5
Resident refused to be interviewed	122	2.3	0	0.0	16	0.4	1	0.0	139	0.7
Unclear	3	0.1	19	0.3	0	0.0	1	0.0	23	0.1
No. of households that had lived in the area for less than one month	4	0.1	6	0.1	2	0.0	20	0.5	32	0.2
No. of households that had lived in the area for more than one month	4,445	82.9	5,494	85.6	4,156	91.0	3,555	82.0	17,650	85.3
Non-migrant	2,692	60.6	2,785	50.7	1,547	37.2	1,715	48.2	8,739	49.5
Lifetime migrant	1,685	37.9	2,166	39.4	2,386	57.4	1,331	37.4	7,568	42.9
Recent migrant	68	1.5	543	9.9	223	5.4	509	14.3	1,343	7.6

a Non-migrant households are those whose household head did not spend a total of five years in a rural area before finishing primary school. Among migrant households, lifetime migrant households are those whose household head had lived in the municipality for more than five years, and recent migrant households are those whose household head had arrived in the municipality within the previous five years. See the text for more detail.

Source: Rural–Urban Migration in Indonesia study, 2008.

Table 3 Allocation of Sample by City^a

	Medan	Tangerang	Samarinda	Makassar		Total
Non-migrant households						
Sampling frame	2,692	2,785	1,547	1,715		8,739
Training sample	14	12	8	8		42
Main sample	303	250	183	182		918
Reserve sample ^b	61	50	37	36		184
Lifetime migrant households						
Sampling frame	1,685	2,166	2,386	1,331		7,568
Training sample	14	12	8	8		42
Main sample	303	250	183	182		918
Reserve sample ^b	61	50	37	36		184
				Single-member household ^c	Multiple-member household ^c	
Recent migrant households						
Sampling frame	68	543	223	269	240	1,343
Training sample	4	12	8	2	6	32
Main sample	54	250	178	34	148	664
Reserve sample ^b	10	150	36	7	29	232

a See the notes to Table 11.2 for a definition of non-migrant, lifetime migrant and recent migrant households.

b The reserve sample (20 per cent of the main sample) was used if all households in the main sample had been visited but the number of households interviewed still fell well below the target sample size for each municipality and migration category. The reserve sample was increased to 60 per cent of the main sample for recent migrant households in Tangerang in order to supplement the sample size for this migration category.

c The sample of recent migrant households in Makassar was divided into single and multiple-member households to take account of the disproportionately high number of students in the city, most of them single and living alone. This group could provide only limited information on labour market activities and the well-being of household members, including children. Households with more than one member, which were unlikely to be student households, were oversampled.

Source: Rural–Urban Migration in Indonesia study, 2008.

Table 4 Non-migrant Households Visited and Interviewed by City^a

	Medan	Tangerang	Samarinda	Makassar	Total
A Number of households in the sampling frame	2692	2785	1547	1715	8739
B Number of households visited	378	300	220	182	1080
Initial sampling factor ((B) / (A))	0.140	0.108	0.142	0.106	0.124
C Number of households not interviewed	83	52	84	16	235
((C) / (B), %)	(22.0)	(17.3)	(38.2)	(8.8)	(21.8)
Reasons for being not interviewed					
Dwelling was not found	3	7	15	1	26
(%)	(0.8)	(2.3)	(6.8)	(0.5)	(2.4)
Household members died or moved away	38	4	0	1	43
(%)	(10.1)	(1.3)	(0.0)	(0.5)	(4.0)
Household members not found (temporarily away or other reason)	11	4	66	2	83
(%)	(2.9)	(1.3)	(30.0)	(1.1)	(7.7)
Interview terminated because respondent was elderly	1	0	0	0	1
(%)	(0.3)	(0.0)	(0.0)	(0.0)	(0.1)
Respondent refused to be interviewed	14	21	2	12	49
(%)	(3.7)	(7.0)	(0.9)	(6.6)	(4.5)
Interview results were invalid	4	0	1	0	5
(%)	(1.1)	(0.0)	(0.5)	(0.0)	(0.5)
D Listing-based migration status was incorrect	12	16	0	0	28
(%)	(3.2)	(5.3)	(0.0)	(0.0)	(2.6)
true status = NM	0	0	0	0	0
true status = LM	12	16	0	0	28
true status = RM	0	0	0	0	0
E Number of households interviewed	295	248	136	166	845
Overall response rate ((E) / (B), %)	(78.0)	(82.7)	(61.8)	(91.2)	(78.2)
Number of households interviewed and:					
F Correctly identified in the listing [Actual status = NM]	274	247	108	124	753
(% among visited households, (F) / (B))	(72.5)	(82.3)	(49.1)	(68.1)	(69.7)
(% among households for which migration status was asked, (F) / [(D) + (E)])	(89.3)	(93.6)	(79.4)	(74.7)	(86.3)
G Incorrectly identified [Actual status = LM]	18	1	24	35	78
(% among visited households, (G) / (B))	(4.8)	(0.3)	(10.9)	(19.2)	(7.2)
(% among households for which migration status was asked, (G) / [(D) + (E)])	(5.9)	(0.4)	(17.6)	(21.1)	(8.9)
H Incorrectly identified [Actual status = RM]	3	0	4	7	14
(% among visited households, (H) / (B))	(0.8)	(0.0)	(1.8)	(3.8)	(1.3)
(% among households for which migration status was asked, (H) / [(D) + (E)])	(1.0)	(0.0)	(2.9)	(4.2)	(1.6)

a See the notes to Table 2 for a definition of non-migrant, lifetime migrant and recent migrant households.

b The number of households visited was either the entire main sample or the main sample plus the reserve sample. Where the target sample size in a certain municipality and migration category was reached after visiting all households in the main sample, the reserve sample was not used. Both main and reserve samples were randomly drawn at the same time.

c In Medan and Tangerang, some households were not interviewed because their migration status was recorded incorrectly in the listing. These households were revisited in the second (2009) round of the survey, so data from future waves of the survey will not be affected by this type of interview failure.

d Interview results were determined to be invalid when serious inconsistencies were found.

Source: Rural–Urban Migration in Indonesia study, 2008.

Table 5 Lifetime-migrant Households Visited and Interviewed by City^a

	Medan	Tangerang	Samarinda	Makassar	Total
A Number of households in the sampling frame	1685	2166	2386	1331	7568
B Number of households visited	378	300	220	182	1080
Sampling factor ((B) / (A))	0.224	0.139	0.092	0.137	0.143
C Number of households not interviewed	69	49	59	21	198
((C) / (B), %)	(18.3)	(16.3)	(26.8)	(11.5)	(18.3)
Reasons for being not interviewed					
Dwelling was found	6	15	7	2	30
(%)	(1.6)	(5.0)	(3.2)	(1.1)	(2.8)
Household members died or moved away	20	2	3	1	26
(%)	(5.3)	(0.7)	(1.4)	(0.5)	(2.4)
Household members not found (temporarily away or other reason)	10	1	44	4	59
(%)	(2.6)	(0.3)	(20.0)	(2.2)	(5.5)
Interview terminated because respondent was elderly	6	1	0	0	7
(%)	(1.6)	(0.3)	(0.0)	(0.0)	(0.6)
Respondent refused to be interviewed	14	14	5	13	46
(%)	(3.7)	(4.7)	(2.3)	(7.1)	(4.3)
Interview results were invalid	1	0	0	1	2
(%)	(0.3)	(0.0)	(0.0)	(0.5)	(0.2)
D Listing-based migration status was incorrect	12	16	0	0	28
(%)	(3.2)	(5.3)	(0.0)	(0.0)	(2.6)
true status = NM	12	16	0	0	28
true status = LM	0	0	0	0	0
true status = RM	0	0	0	0	0
E Number of households interviewed	309	251	161	161	882
Overall response rate ((E) / (B), %)	(81.7)	(83.7)	(73.2)	(88.5)	(81.7)
Number of households interviewed and:					
F Incorrectly identified [Actual status = NM]	25	1	49	40	115
(% among visited households, (F) / (B))	(6.6)	(0.3)	(22.3)	(22.0)	(10.6)
(% among households for which migration status was asked, (F) / [(D) + (E)])	(7.8)	(0.4)	(30.4)	(24.8)	(12.6)
G Correctly identified in the listing [Actual status = LM]	284	245	108	114	751
(% among visited households, (G) / (B))	(75.1)	(81.7)	(49.1)	(62.6)	(69.5)
(% among households for which migration status was asked, (G) / [(D) + (E)])	(88.5)	(91.8)	(67.1)	(70.8)	(82.5)
H Incorrectly identified [Actual status = RM]	0	5	4	7	16
(% among visited households, (H) / (B))	(0.0)	(1.7)	(1.8)	(3.8)	(1.5)
(% among households for which migration status was asked, (H) / [(D) + (E)])	(0.0)	(1.9)	(2.5)	(4.3)	(1.8)

a See the notes to Table.2 for a definition of non-migrant, lifetime migrant and recent migrant households. See the notes to Table 4 for a description of the number of households visited and interviewed.

Source: Rural–Urban Migration in Indonesia study, 2008.

Table 6 Recent-migrant Households Visited and Interviewed by City^a

	Medan	Tangerang	Samarinda	Makassar	Total	
				one- person household	more- than-one- person household	
A Number of households in the sampling frame	68	543	223	269	1343	
B Number of households visited	68	400	214	41	900	
Sampling factor ((B) / (A))	1.000	0.737	0.960	0.152	0.670	
C Number of households not interviewed ((C) / (B), %)	37 (54.4)	149 (37.3)	62 (29.0)	2 (4.9)	13 (7.3)	263 (29.2)
Reasons for being not asked migration status						
Dwelling was not found (%)	2 (2.9)	51 (12.8)	1 (0.5)	0 (0.0)	2 (1.1)	56 (6.2)
Household members died or moved away (%)	12 (17.6)	8 (2.0)	3 (1.4)	0 (0.0)	0 (0.0)	23 (2.6)
Household members not found (temporarily away or other reason) (%)	2 (2.9)	2 (0.5)	57 (26.6)	0 (0.0)	0 (0.0)	61 (6.8)
Interview terminated because respondent was elderly (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Respondent refused to be interviewed (%)	0 (0.0)	16 (4.0)	1 (0.5)	2 (4.9)	11 (6.2)	30 (3.3)
D Listing-based migration status was incorrect (%)	21 (30.9)	72 (18.0)	0 (0.0)	0 (0.0)	0 (0.0)	93 (10.3)
true status = NM	8	3	0	0	0	11
true status = LM	13	69	0	0	0	82
true status = RM	0	0	0	0	0	0
E Number of households interviewed Overall response rate ((E) / (B), %)	31 (45.6)	251 (62.8)	152 (71.0)	39 (95.1)	164 (92.7)	637 (70.8)
Number of households interviewed and:						
F Incorrectly identified [Actual status = NM] (% among visited households, (F) / (B)) (% among households for which migration status was asked, (F) / [(D) + (E)])	0 (0.0) (0.0)	0 (0.0) (0.0)	31 (14.5) (20.4)	4 (9.8) (10.3)	10 (5.6) (6.1)	45 (5.0) (6.2)
G Incorrectly identified [Actual status = LM] (% among visited households, (G) / (B)) (% among households for which migration status was asked, (G) / [(D) + (E)])	3 (4.4) (5.8)	3 (0.8) (0.9)	50 (23.4) (32.9)	2 (4.9) (5.1)	37 (20.9) (22.6)	95 (10.6) (13.0)
H Correctly identified in the listing [Actual status = RM] (% among visited households, (H) / (B)) (% among households for which migration status was asked, (H) / [(D) + (E)])	28 (41.2) (53.8)	248 (62.0) (76.8)	71 (33.2) (46.7)	33 (80.5) (84.6)	117 (66.1) (71.3)	497 (55.2) (68.1)

a See the notes to Table 2 for a definition of non-migrant, lifetime migrant and recent migrant households. See the notes to Table 4 for a description of the number of households visited and interviewed.

Source: Rural–Urban Migration in Indonesia study, 2008.

Appendix Table 1 Distribution of migrants in Sumatera

prov ID	city ID	Province name	City name	Long-term migrants					Short-term migrants						
				Total Population in urban districts	Overall migrants			Rural-urban migrants		Population aged > 5	Overall migrants			Rural-urban migrants	
					Number (persons)	Number (persons)	%	Number (persons)	%		Number (persons)	Number (persons)	%	Number (persons)	%
12	75	Sumatera Urara	MEDAN	2,029,797	393,596	19.4	274,949	13.5	1,850,321	88,094	4.8	55,427	3.0		
16	71	Sumatera Selatan	PALEMBANG	1,342,258	328,902	24.5	236,134	17.6	1,231,388	55,375	4.5	35,328	2.9		
21	71	Kepulauan Riau	BATAM	616,088	419,102	68.0	221,925	36.0	543,926	137,190	25.2	70,478	13.0		
18	71	Lampung	BANDAR LAMPUNG	790,057	296,822	37.6	207,646	26.3	713,624	60,518	8.5	37,224	5.2		
14	71	Riau	PEKANBARU	717,618	343,774	47.9	189,712	26.4	637,042	75,001	11.8	40,026	6.3		
13	71	Sumatera Barat	PADANG	799,741	241,297	30.2	147,756	18.5	724,296	75,884	10.5	38,387	5.3		
17	71	Bengkulu	BENGKULU	257,763	131,598	51.1	97,825	38.0	237,469	30,933	13.0	24,944	10.5		
15	71	Jambi	JAMBI	437,012	126,562	29.0	86,354	19.8	390,732	22,499	5.8	13,634	3.5		
14	73	Riau	DUMAI	218,643	112,235	51.3	73,584	33.7	192,581	31,856	16.5	19,528	10.1		
16	72	Sumatera Selatan	PRABUMULIH	129,201	78,218	60.5	68,003	52.6	116,929	3,730	3.2	1,975	1.7		
21	72	Kepulauan Riau	TANJUNGPINANG	167,958	82,522	49.1	57,164	34.0	151,838	18,290	12.0	9,796	6.5		
16	74	Sumatera Selatan	LUBUK LINGGAU	174,472	64,369	36.9	48,961	28.1	156,592	14,475	9.2	8,240	5.3		
12	73	Sumatera Urara	PEMATANG SIANTAR	229,525	63,895	27.8	48,505	21.1	208,958	12,287	5.9	7,370	3.5		
12	76	Sumatera Urara	BINJAI	238,209	72,896	30.6	43,292	18.2	216,840	23,956	11.0	9,595	4.4		
12	74	Sumatera Urara	TEBING TINGGI	134,548	40,565	30.1	29,816	22.2	119,135	7,401	6.2	5,102	4.3		
18	72	Lampung	METRO	127,569	37,670	29.5	27,610	21.6	116,893	5,991	5.1	4,949	4.2		
12	77	Sumatera Urara	PADANG SIDEMPUAN	178,148	40,334	22.6	27,123	15.2	159,534	11,469	7.2	5,028	3.2		
19	71	Bangka Belitung	PANGKAL PINANG	145,945	36,785	25.2	26,055	17.9	132,788	10,455	7.9	5,868	4.4		
13	75	Sumatera Barat	BUKITTINGGI	100,512	40,158	40.0	25,637	25.5	90,346	11,314	12.5	5,909	6.5		
12	71	Sumatera Urara	SIBOLGA	90,489	30,542	33.8	23,238	25.7	79,821	9,459	11.9	6,761	8.5		
12	72	Sumatera Urara	TANJUNG BALAI	152,272	25,107	16.5	17,027	11.2	134,145	4,653	3.5	1,466	1.1		
13	76	Sumatera Barat	PAYAKUMBUH	101,819	23,456	23.0	13,443	13.2	89,950	8,351	9.3	3,518	3.9		
13	72	Sumatera Barat	SOLOK	54,049	18,609	34.4	10,879	20.1	47,816	6,360	13.3	4,130	8.6		
13	74	Sumatera Barat	PADANG PANJANG	45,439	17,752	39.1	10,865	23.9	40,563	6,167	15.2	2,920	7.2		
16	73	Sumatera Selatan	PAGAR ALAM	114,609	13,213	11.5	10,382	9.1	104,846	1,037	1.0	813	0.8		
13	77	Sumatera Barat	PARIAMAN	70,032	14,307	20.4	6,535	9.3	63,870	5,744	9.0	1,906	3.0		
13	73	Sumatera Barat	SAWAH LUNTO	53,081	7,514	14.2	3,685	6.9	47,682	2,488	5.2	1,129	2.4		

Source: Supas, 2005.

Appendix Table 2 Distribution of migrants in Sulawesi

prov ID	city ID	Province name	City name	Long-term migrants					Short-term migrants						
				Total Population in urban districts	Overall migrants			Rural-urban migrants		Population aged > 5	Overall migrants			Rural-urban migrants	
					Number (persons)	Number (persons)	%	Number (persons)	%		Number (persons)	Number (persons)	%	Number (persons)	%
73	71	Sulawesi Selatan	MAKASAR	1,194,583	425,929	35.7	331,723	27.8	1,075,582	109,970	10.2	82,196	7.6		
71	71	Sulawesi Utara	MANADO	405,715	157,372	38.8	122,259	30.1	365,975	21,983	6.0	14,194	3.9		
72	71	Sulawesi Tengah	PALU	291,872	127,889	43.8	99,148	34.0	260,782	40,420	15.5	30,058	11.5		
74	71	Sulawesi Tenggara	KENDARI	236,269	100,368	42.5	76,786	32.5	212,658	24,287	11.4	17,578	8.3		
71	72	Sulawesi Utara	BITUNG	163,837	70,463	43.0	49,396	30.1	146,717	9,406	6.4	5,454	3.7		
73	73	Sulawesi Selatan	PALOPO	129,273	39,959	30.9	32,894	25.4	117,747	10,655	9.0	7,794	6.6		
73	72	Sulawesi Selatan	PARE-PARE	112,625	31,156	27.7	25,271	22.4	100,680	7,521	7.5	5,465	5.4		
74	72	Sulawesi Tenggara	BAU-BAU	118,998	29,730	25.0	19,119	16.1	105,261	9,446	9.0	5,515	5.2		
75	71	Gorontalo	GORONTALO	153,036	21,062	13.8	15,108	9.9	137,659	10,576	7.7	6,893	5.0		
71	73	Sulawesi Utara	TOMOHON	80,649	12,440	15.4	9,416	11.7	74,489	457	0.6	65	0.1		
				2,886,857	1,016,368	35.2	781,120	27.1	2,597,550	244,721	9.4	175,212	6.7		
94	72	Papua	SORONG	146,390	113,130	77.3	88,395	60.4	131,020	10,580	8.1	6,230	4.8		
94	71	Papua	JAYAPURA	197,396	101,446	51.4	74,897	37.9	174,536	11,880	6.8	6,766	3.9		
81	71	Maluku	AMBON	233,819	63,992	27.4	55,382	23.7	210,276	7,926	3.8	6,455	3.1		
82	71	Maluku Utara	TERNATE	156,735	40,749	26.0	29,014	18.5	139,844	9,497	6.8	5,767	4.1		
82	72	Maluku Utara	TIDORE KEPULAUAN	78,025	15,435	19.8	4,866	6.2	69,156	1,442	2.1	929	1.3		
				812,365	334,752	41.2	252,554	31.1	724,832	41,325	5.7	26,147	3.6		
		Total		3,699,222	1,351,120	36.5	1,033,674	27.9	3,322,382	286,046	8.6	201,359	6.1		

Source: Supas, 2005.

Appendix Table 3 Distribution of migrants in Java

prov ID	city ID	Province name	City name	Long-term migrants					Short-term migrants						
				Total Population in urban districts	Overall migrants			Rural-urban migrants		Population aged > 5	Overall migrants			Rural-urban migrants	
					Number (persons)	Number (persons)	%	Number (persons)	%		Number (persons)	Number (persons)	%	Number (persons)	%
35	78	Jawa Timur	SURABAYA	2,611,506	912,414	34.9	758,780	29.1	2,399,253	169,872	7.1	141,177	5.9		
31	72	DKI Jakarta	JAKARTA TIMUR	2,391,166	1,042,777	43.6	685,157	28.7	2,191,760	201,881	9.2	136,287	6.2		
31	74	DKI Jakarta	JAKARTA BARAT	2,093,013	911,608	43.6	600,946	28.7	1,920,673	173,595	9.0	103,979	5.4		
32	75	Jawa Barat	BEKASI	1,993,478	1,083,793	54.4	494,424	24.8	1,853,020	201,739	10.9	75,320	4.1		
32	73	Jawa Barat	BANDUNG	2,288,570	647,553	28.3	477,625	20.9	2,111,945	88,043	4.2	58,476	2.8		
31	71	DKI Jakarta	JAKARTA SELATAN	2,001,353	763,238	38.1	456,416	22.8	1,836,063	144,943	7.9	84,614	4.6		
31	75	DKI Jakarta	JAKARTA UTARA	1,445,623	610,175	42.2	434,076	30.0	1,337,410	92,493	6.9	67,857	5.1		
36	71	Banten	TANGERANG	1,451,595	647,476	44.6	348,493	24.0	1,312,967	150,258	11.4	65,644	5.0		
32	76	Jawa Barat	DEPOK	1,374,903	756,306	55.0	327,296	23.8	1,233,490	170,103	13.8	43,529	3.5		
33	74	Jawa Tengah	SEMARANG	1,438,733	386,765	26.9	314,067	21.8	1,337,171	71,138	5.3	59,690	4.5		
32	77	Jawa Barat	CIMAHI	546,879	264,348	48.3	217,594	39.8	496,935	36,498	7.3	24,310	4.9		
31	73	DKI Jakarta	JAKARTA PUSAT	889,448	314,019	35.3	190,451	21.4	821,723	59,718	7.3	37,411	4.6		
35	73	Jawa Timur	MALANG	790,356	229,745	29.1	173,161	21.9	726,111	87,301	12.0	57,521	7.9		
34	71	DI Yogyakarta	YOGYAKARTA	433,539	183,769	42.4	137,134	31.6	407,727	67,877	16.6	47,063	11.5		
33	72	Jawa Tengah	SURAKARTA	506,397	139,721	27.6	115,991	22.9	469,196	30,987	6.6	21,861	4.7		
32	71	Jawa Barat	BOGOR	891,467	180,415	20.2	93,700	10.5	825,314	29,217	3.5	15,783	1.9		
32	78	Jawa Barat	TASIKMALAYA	582,423	75,808	13.0	56,958	9.8	525,928	17,946	3.4	11,688	2.2		
32	74	Jawa Barat	CIREBON	308,771	69,928	22.6	53,380	17.3	282,478	15,303	5.4	10,488	3.7		
36	72	Banten	CILEGON	324,143	75,308	23.2	50,300	15.5	298,715	12,519	4.2	7,536	2.5		
32	79	Jawa Barat	BANJAR	162,383	46,055	28.4	41,933	25.8	148,705	6,524	4.4	4,296	2.9		
32	72	Jawa Barat	SUKABUMI	291,277	59,402	20.4	40,561	13.9	266,038	11,149	4.2	5,179	1.9		
35	74	Jawa Timur	PROBOLINGGO	211,142	47,604	22.5	38,458	18.2	192,767	12,917	6.7	9,825	5.1		
35	77	Jawa Timur	MADIUN	171,390	47,837	27.9	37,236	21.7	157,572	13,227	8.4	8,824	5.6		
35	71	Jawa Timur	KEDIRI	248,640	44,946	18.1	32,383	13.0	229,551	10,962	4.8	7,112	3.1		
33	73	Jawa Tengah	SALATIGA	165,394	44,059	26.6	31,615	19.1	152,595	13,230	8.7	9,368	6.1		
35	76	Jawa Timur	MOJOKERTO	111,860	34,125	30.5	25,546	22.8	103,365	8,911	8.6	5,815	5.6		
33	71	Jawa Tengah	MAGELANG	124,374	34,589	27.8	23,720	19.1	115,844	7,486	6.5	4,995	4.3		
33	76	Jawa Tengah	TEGAL	238,676	31,693	13.3	20,460	8.6	219,763	10,421	4.7	5,345	2.4		

35	72	Jawa Timur	BLITAR	126,776	23,752	18.7	17,012	13.4	117,192	6,886	5.9	4,795	4.1
35	79	Jawa Timur	BATU	179,092	21,304	11.9	16,360	9.1	165,918	5,325	3.2	3,369	2.0
33	75	Jawa Tengah	PEKALONGAN	269,177	24,746	9.2	15,539	5.8	248,502	5,660	2.3	2,411	1.0
35	75	Jawa Timur	PASURUAN	171,136	19,953	11.7	12,001	7.0	158,533	2,166	1.4	1,676	1.1
				26,834,680	9,775,231	36.4	6,338,773	23.6	24,664,224	1,936,295	7.9	1,143,244	4.6
51	71	Bali	DENPASAR	574,610	265,358	46.2	231,642	40.3	518,361	71,127	13.7	53,498	10.3
53	71	Nusa Tenggara Timur	KUPANG	269,680	179,367	66.5	165,107	61.2	237,091	24,847	10.5	18,483	7.8
52	71	Nusa Tenggara Barat	MATARAM	342,896	66,744	19.5	54,467	15.9	307,956	18,275	5.9	15,539	5.0
52	72	Nusa Tenggara Barat	BIMA	123,064	13,261	10.8	9,827	8.0	110,352	6,163	5.6	4,422	4.0
				1,310,250	524,730	40.0	461,043	35.2	1,173,760	120,412	10.3	91,942	7.8
Total				28,144,930	10,299,961	36.6	6,799,816	24.2	25,837,984	2,056,707	8.0	1,235,186	4.8

Source: Supas, 2005.

Appendix Table 4 Distribution of migrants in Kalimantan

prov ID	city ID	Province name	City name	Long-term migrants					Short-term migrants						
				Total Population in urban districts	Overall migrants			Rural-urban migrants		Population aged > 5	Overall migrants			Rural-urban migrants	
					Number (persons)	Number (persons)	%	Number (persons)	%		Number (persons)	Number (persons)	%	Number (persons)	%
64	72	Kalimantan Timur	SAMARINDA	574,439	273,447	47.6	189,075	32.9	518,162	44,193	8.5	28,782	5.6		
64	71	Kalimantan Timur	BALIKPAPAN	469,884	217,378	46.3	144,189	30.7	424,408	43,597	10.3	24,578	5.8		
63	71	Kalimantan Selatan	BANJARMASIN	589,115	163,043	27.7	128,300	21.8	529,828	24,047	4.5	13,917	2.6		
61	71	Kalimantan Barat	PONTIANAK	501,843	145,096	28.9	118,370	23.6	453,953	22,620	5.0	19,125	4.2		
62	71	Kalimantan Tengah	PALANGKA RAYA	170,761	97,947	57.4	74,022	43.3	155,467	18,028	11.6	14,837	9.5		
64	73	Kalimantan Timur	TARAKAN	155,716	72,629	46.6	56,323	36.2	136,444	15,262	11.2	10,253	7.5		
63	72	Kalimantan Selatan	BANJAR BARU	152,839	76,424	50.0	55,091	36.0	136,225	16,032	11.8	10,693	7.8		
64	74	Kalimantan Timur	BONTANG	120,348	74,084	61.6	48,167	40.0	106,291	13,884	13.1	6,554	6.2		
61	72	Kalimantan Barat	SINGKAWANG	167,892	43,934	26.2	37,498	22.3	150,810	9,966	6.6	5,876	3.9		
Total				2,902,837	1,163,982	40.1	851,035	29.3	2,611,588	207,629	8.0	134,615	5.2		

Source: Supas, 2005.